

utils.py

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1  from math import pi, sin, cos, radians
2  from random import randint, random, uniform
3  from time import sleep
4
5  import pygame
6  from pygame.locals import *
7  from OpenGL.GL import *
8  from OpenGL.GLU import *
9
10 from console import *
11
12 DEFAULT_RESOLUTION = (800, 800)
13 FPS_CAP = 30
14 FPS_COUNT = 0
15 CAM_POSITION = (0, 0, -14)
16 # LIGHT_POSITION = -CAM_POSITION[2]
17 LIGHT_CAP = 4.0
18 LIGHT_POSITION = (0, 0, LIGHT_CAP, 1)
19 LIGHT_DIFFUSION = (LIGHT_CAP, LIGHT_CAP, LIGHT_CAP, 1)
20
21 UNIFORM_DIRECTION_CAP = 0.1
22 UNIFORM_DIRECTION_AREA = (-UNIFORM_DIRECTION_CAP, UNIFORM_DIRECTION_CAP)
23 BORDER_COLLITION_CAP = 4.0
24
25 COLORS = {
26     'white'      : (1, 1, 1),
27     'gray'       : (.75, .75, .75),
28     'dark_gray'  : (.5, .5, .5),
29     'black'      : (0, 0, 0),
30
31     'red'        : (1, 0, 0),
32     'green'      : (0, 1, 0),
33     'g_cage'     : (0, 1, 0),
34     'blue'       : (0, 0, 1),
35
36     'magenta'    : (1, 0, 1),
37     'yellow'     : (1, 1, 0),
38     'yellow_c'   : (1, 0.75, 0),
39     'cyan'       : (0, 1, 1),
40 }
```